applying a magnetic field to draw down the beads, and

separating from the beads a second supernatant liquid which is the said product solution containing the nucleic acid.

23. The method as claimed in claim 22, wherein the starting solution is in an aqueous medium.

24. A method of making a product solution containing low molecular weight nucleic acid by treating a starting bacterial lysate by the use of suspended magnetically attractable beads which do not specifically bind the nucleic acid, comprising the steps of:

forming in the bacterial lysate a first precipitate selected from the group consisting of cell debris, protein and chromosomal DNA, in the presence of the suspended magnetically attractable beads, which first precipitate becomes non-specifically associated with the beads,

applying a magnetic field to draw down the first precipitate and the associated beads,

recovering a starting solution containing the low molecular weight nucleic acid,

precipitating the low molecular weight nucleic acid out of the starting solution in the presence of the suspended magnetically attractable beads whereby a nucleic acid precipitate becomes non-specifically associated with the beads,

applying a magnetic field to draw down the nucleic acid precipitate and the associated beads,

separating the nucleic acid precipitate from a first supernatant liquid,

adding liquid to the nucleic acid precipitate to re-dissolve the nucleic acid and re-suspend the beads,

applying a magnetic field to draw down the beads, and

separating from the beads a second supernatant liquid which is the said product solution containing low molecular weight nucleic acid.

25. A method of making a nucleic-acid-containing liquid by treating a solution containing protein and nucleic acid by the use of magnetically attractable beads which do not specifically bind the nucleic acid, comprising the steps of:

forming in the solution a first precipitate comprising protein and nucleic acid in the presence of the suspended magnetically attractable beads which first precipitate becomes non-specifically associated with the beads,

applying a magnetic field to draw down the beads and the associated first precipitate,

separating the first precipitate from a first supernatant liquid,

adding liquid to the first precipitate to selectively re-dissolve the protein and re-suspend the beads and the associated nucleic acid,

applying a magnetic field to draw down a second precipitate of the nucleic acid and the associated beads,

separating a second supernatant liquid containing the protein from the second precipitate,

adding liquid to the second precipitate to re-dissolve the nucleic acid and re-suspend the beads,

applying a magnetic field to draw down the beads, and

separating from the beads the desired nucleic-acid-containing liquid.

26. A method for recovering nucleic acid from a starting solution of bacteriophage, by the use of magnetically attractable beads which do not specifically bind the said bacteriophage, which method comprises the steps:

precipitating the said bacteriophage out of the solution in the presence of the suspended magnetically

attractable beads whereby the bacteriophage becomes non-specifically associated with the beads;

applying a magnetic field to draw down a precipitate of the bacteriophage and the associated beads;

lysing the said bacteriophage to form a lysate solution comprising protein and nucleic acid;

precipitating out of the solution the nucleic acid in the presence of suspended magnetically attractable beads whereby a nucleic acid precipitate becomes non-specifically associated with the beads;

applying a magnetic field to draw down the nucleic acid precipitate and the associated beads;

separating the nucleic acid precipitate from a first supernatant liquid;

adding liquid to the nucleic acid precipitate to re-dissolve the nucleic acid and re-suspend the beads;

applying a magnetic field to drawn down the beads; and

separating a second supernatant liquid containing the nucleic acid from the beads.

27. The method as claimed in any one of claims 24, 25 and 26, wherein the beads have been pre-treated with a phosphate solution to reduce the tendency of the beads to bind to a nucleic acid.--

REMARKS

Upon entry of the above amendment, the claims will be 22 to 27.

The significance of these claims will be further apparent from the remarks below.

Undersigned acknowledges the helpful interview Examiner Reardon on June 20, 1995.

In attendance at this interview were undersigned and applicant's British agent, Mr. Pyers Pennant.